```
                    -- Century Conversion --

              Bruce Dickens    Apr 04, 1996

10     open structure tools:name 'otms_src_dir:tools'
       open #2 : name 'last_inv.dat', access output
          print "   Tools Last Inventory Data Format' Check for 1996 Inventory"
          print "ToolNo                   ";  "  Model No  ";  "  LAST_INV  "; "LAST_INV "
          print "======                   ";  "  ========  ";  "  ========  "; "======== "
          print "Extract Data:"
          print #2: "ToolNo                   ";  "  Model No  ";  "  LAST_INV "; "LAST_I
NV "
          print #2: "======                   ";  "  ========  ";  "  ========  "; "======
== "
          print #2: "Extract Data:"

20     extract structure tools
          yy$ = lpad$ (element$(tools(last_inv),3,"/"), 2, "0" )
          mm$ = lpad$ (element$(tools(last_inv),1,"/"), 2, "0" )
          dd$ = lpad$ (element$(tools(last_inv),2,"/"), 2, "0" )
          cc$= yy$ + "/" +  mm$ + "/" + dd$
          cl$ = change$(cc$,'/','')
          if cl$[1:2] < '50' then
            c$ = '20' + cl$
          else
            c$= '19' + cl$
          end if
          include c$ < '19960101'
            sort by tools(model)
            sort by rpad$(c$,8, '0')
          if c$[1:8] < '19960101'  then
          print tools(toolno); tab(23); tools(model);   &
                     tab(35);tools(last_inv); tab(44); c$
          print #2: tools(toolno); tab(23); tools(model);   &
                     tab(35);tools(last_inv); tab(44); c$
                 if valid ( cl$, "digits" ) = 0 then
                 print; tab(53); " Date format is not digits"
                 print #2:; tab(53); " Date format is not digits"
                 end if
                 if valid ( cl$, "minlength 6" ) = 0 then
                 print ;tab(50); " Date format is short"
                 print #2: ;tab(50); " Date format is short"
                 end if
                 if tools(last_inv) = "" then
                 print ;tab(53); " Date format is blank "
                 print #2: ;tab(53); " Date format is blank "
                 end if
          end if
30     end extract
          print
          print "Sorted Data:"
          print
40     for each tools
          cl$ = change$(tools(last_inv),'/','')
          print tools(toolno); tab(23); tools(model); &
           tab(35); tools(last_inv); tab(44); c$
          print #2: tools(toolno); tab(23); tools(model); &
           tab(35); tools(last_inv); tab(44); c$
                 if valid ( cl$, "digits" ) = 0 then
                 print ;tab(53); " Date format is not digits"
                 print #2: ;tab(53); " Date format is not digits"
                 end if
                 if valid ( cl$, "minlength 6" ) = 0 then
                 print ;tab(53); " Date format is short"
                 print #2: ;tab(53); " Date format is short"
                 end if
```

Exhibit A

1.(with amendments)   A method of processing symbolic representations of dates stored in a database, comprising the steps of

> providing a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time;

> selecting a 10-decade window with a Y_AY_B value for the first decade of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;

> determining a century designator C_1C_2 for each symbolic representation of a date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ; and

> reformatting the symbolic representation of the date [in the database] with the values C_1C_2, Y_1Y_2, M_1M_2, D_1D_2 <u>to facilitate further processing of the dates.</u>

11.(with amendments)   A method of processing dates in a database, comprising the steps of

provideing a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time which includes the decade beginning in the year 2000;

selecting a 10-decade window with a Y_AY_B value for the first decade of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;

determining a century designator C_1C_2 for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B ; and

reformatting each date [in the database] <u>in the form</u> <u>$C_1C_2Y_1Y_2M_1M_2D_1D_2$ to facilitate further processing of the</u> <u>dates</u> and

sorting the dates [in the database] <u>in the form</u> <u>$C_1C_2Y_1Y_2M_1M_2D_1D_2$</u> [using a numerical-order sort].

OFFICIAL PATENT

#9/1

Attorney's Docket No. 08190-0119.000

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Bruce Dickens   Group Art Unit: 2307
Serial No.: 08/725,574   Examiner: W. Amsbury
Filed: October 3, 1996
For: DATE FORMATTING AND
     SORTING FOR SPANNING
     THE TURN OF THE CENTURY   April 2, 1998

Assistant Commissioner for Patents
Washington, DC 20231

SUPPLEMENTAL RESPONSE

Sir:

This Supplemental Response is intended to supplement the Response filed March 17, 1998 by amending the above-identified patent application as follows:

In The Claims:

Please amend independent Claims 1, 4, 6, 8, 10, 11 and 13 as follows:

1.   (Amended) A method of processing symbolic representations of dates stored in a database, comprising the steps of

providing a database with symbolic representations of dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator, all of the symbolic representations of dates falling within a 10-decade period of time;

selecting a 10-decade window with a Y_AY_B value for the first decade of the window, Y_AY_B being no later

10

In re: Bruce Dickens
Serial No.: 08/725,574
Filed: October 3, 1996
Page 2

than the earliest Y_1Y_2 year designator in the database;

determining a century designator C_1C_2 for each symbolic representation of a date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B; and

reformatting the symbolic representation of the date [in the database] with the values C_1C_2, Y_1Y_2, M_1M_2, and D_1D_2 to facilitate further processing of the dates.

Claim 4, line 3, please delete "in the database".

Claim 6, line 3, please delete "in the database".

Claim 8, line 1, please delete "1", and insert -- 10 -- therefor.

Claim 10, line 3, please delete "sorted".

11. (Amended) A method of processing dates in a database, comprising the steps of
providing a database with dates stored therein according to a format wherein M_1M_2 is the numerical month designator, D_1D_2 is the numerical day designator, and Y_1Y_2 is the numerical year designator, all of dates falling within a 10-decade period of

In re: Bruce Dickens
Serial No.: 08/725,574
Filed: October 3, 1996
Page 3

time which includes the decade beginning in the year 2000;

selecting a 10-decade window with a Y_AY_B value for the first decade of the window, Y_AY_B being no later than the earliest Y_1Y_2 year designator in the database;

determining a century designator C_1C_2 for each date in the database, C_1C_2 having a first value if Y_1Y_2 is less than Y_AY_B and having a second value if Y_1Y_2 is equal to or greater than Y_AY_B; [and]

reformatting each date [in the database] in the form $C_1C_2Y_1Y_2M_1M_2D_1D_2$ to facilitate further processing of the dates; and

sorting the dates [in the database] in the form $C_1C_2Y_1Y_2M_1M_2D_1D_2$.

Claim 13, line 1, please delete "11", and insert -- 15 -- therefor.

REMARKS

As noted by the prior Response filed March 17, 1998, the first Official Action objected to the disclosure for implying that the current invention does not require additional data fields for storage to solve the year 2000 problem. The Official Action also rejected all of the claims under 35 U.S.C. § 112, first paragraph, as based on a disclosure that is not enabling. In particular, the Official Action stated that the conversion of the existing symbolic

In re: Bruce Dickens
Serial No.: 08/725,574
Filed: October 3, 1996
Page 4

date representations without the addition of new data fields is critical or essential to the invention, but is not included in the claims.

As stated in the Background Of The Invention section of the present application, conventional date formatting systems typically require additional data fields for storage to accommodate the century designators. These additional data fields are necessary because conventional systems permanently reformat the stored data. In contrast, the method of the present invention, as described by the specification, does not require that the converted or reformatted data that includes century designations be stored in data storage. Accordingly, independent Claims 1 and 11 have now been amended so as to **not require storage** of the converted dates, thereby not imposing any requirement for new data fields.

Thus, the method of the claimed invention encompasses embodiments in which the date information is initially reformatted and converted to have century designations, but does not require that the reformatted dates be stored. For example, the method of one embodiment of the claimed invention reads the dates from the database and temporarily reformats the dates with century designations. Data manipulation programs are then performed on these reformatted dates, such as sorting the dates. However, once the data manipulations are complete, the reformatted dates need not be stored in data storage. Instead,

In re: Bruce Dickens
Serial No.: 08/725,574
Filed: October 3, 1996
Page 5

the dates in data storage can remain the same as they were prior to the temporary reformatting of the date information. Thus, the method of this embodiment of the claimed invention does not require additional data fields for storage because the reformatted dates with century designations are only used "on the fly" for data manipulation and are not stored in data storage.

In view of the amendments to the independent claims, dependent Claims 4 and 6 have also been amended to no longer refer to symbolic representations of dates "in the database". Since dependent Claims 10 and 15 further recite storing the reformatted dates in the database, dependent Claims 8 and 13 which further describe manipulating information in the database that includes the reformatted dates have also been amended to depend from dependent Claims 10 and 15, respectively. Finally, dependent Claim 10 has been amended to delete reference to "sorted" symbolic representations of the dates to provide proper antecedent basis.
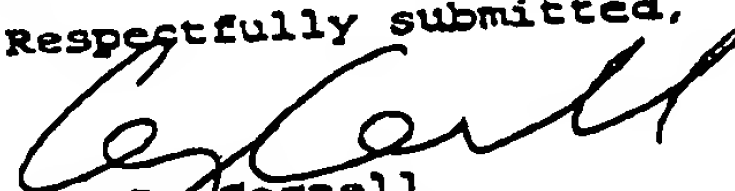
For the reasons described above, Applicant therefore submits that the disclosure is enabling and that both the disclosure and the claims, as amended, comply with 35 U.S.C. § 112, first paragraph. As such, the rejections raised by the first Official Action under 35 U.S.C. § 112 are therefore overcome.

In re: Bruce Dickens
Serial No.: 08/725,574
Filed: October 3, 1996
Page 6

CONCLUSION

In view of the amended claims and the remarks presented above, it is respectively submitted that all of the present claims of the application are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present application. The Commissioner is also hereby authorized to charge our Deposit Account No. 16-0605 for any additional extensions of time that are required for entry and consideration of this Supplemental Response beyond the one month extension of time that was previously obtained in conjunction with the prior Response.
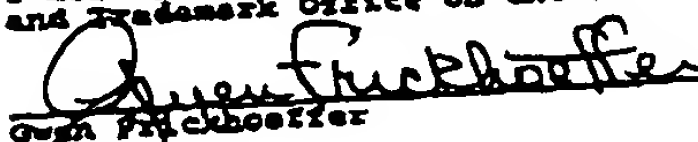
Respectfully submitted,

Guy R. Gosnell
Registration No. 34,610

BELL SELTZER INTELLECTUAL PROPERTY LAW GROUP
ALSTON & BIRD LLP
Post Office Drawer 34009
Charlotte, NC 28234
Tel (704) 331-6000
Fax (704) 334-2014

CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Owen Frickhoeffer

April 2, 1998
Date

336324

Paper # 9

BELL SELTZER
Intellectual Property Law Group
ALSTON&BIRD LLP

1211 East Morehead Street
P.O. Drawer 34009
Charlotte, NC 28234-4009
704-331-6000
Fax: 704-334-2014

OFFICIAL

TELECOPY
PLEASE DELIVER THE FOLLOWING MATERIAL AS SOON AS POSSIBLE

DATE:	April 2, 1998
TO:	**Examiner Wayne Amsbury, Group Art Unit 2307**
	U.S. Patent And Trademark Office
RE:	**Bruce Dickens, Serial No. 08/725,574, filed October 3, 1996 For: DATE FORMATTING AND SORTING FOR SPANNING THE TURN OF THE CENTURY.**
FROM:	Guy R. Gosnell, Esq.

MESSAGE:

Following is the Supplemental Response we have discussed.

NO. OF PAGES: 7 (Including cover page)	**FAX OPERATOR:**
	FAX NUMBER: (703) 305 9731
USER CODE:	**INTERNATIONAL:** (011)
CLIENT/MATTER: 08190-0119.000	**ADDRESSEE**
REQUESTED BY: Gwen **Ext:** 6173	**TELEPHONE NO.:** (703) 305,3828

IF NOT RECEIVED PROPERLY, PLEASE NOTIFY US IMMEDIATELY AT (704) 331-6115

316141

A

Interview Summary	Application No. 08/725,574	Applicant(s) Dickens	
	Examiner Wayne Amsbury	Group Art Unit 2771	

All participants (applicant, applicant's representative, PTO personnel):

(1) *Wayne Amsbury*   (3) _____

(2) *Guy Gosnell*   (4) _____

Date of Interview   *Apr 2, 1998*

Type: ☒ Telephonic   ☐ Personal (copy is given to   ☐ applicant   ☐ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes   ☒ No. If yes, brief description:

_____

Agreement ☒ was reached. ☐ was not reached.

Claim(s) discussed: *1-15*

Identification of prior art discussed:
Art of record in the case.

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:
It was agreed that the summary of the invention, and the arguments of the response, were not entirely in conformity with the claims, which would be potentially allowable if the use of additional century digits did not include their storage in the database. It was further agreed that Applicant would fax a supplementary amendment to address this problem.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendents which would render the claims allowable is available, a summary thereof must be attached.)

1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

WAYNE AMSBURY
PRIMARY PATENT EXAMINER

Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

	Application No.	Applicant(s)
Notice of Allowability	08/725,574	**Dickens**
	Examiner	Group Art Unit
	Wayne Amsbury	2771

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to *faxed supplementary amendment of 4/2/98* _____.

☒ The allowed claim(s) is/are *1-15* _____.

☐ The drawings filed on _____ are acceptable.

' Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

 ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

  ☐ received.

  | | received in Application No. (Series Code/Serial Number) _____ .

  | | received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

 *Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

 ☒ because the originally filed drawings were declared by applicant to be informal.

 ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. __5__ .

 ☐ including changes required by the proposed drawing correction filed on _____ , which has been approved by the examiner.

 ☒ including changes required by the attached Examiner's Amendment/Comment.

 Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal lettter addressed to the Official Draftsperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

Attachment(s)
 ☐ Notice of References Cited, PTO-892
 ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
 ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
 ☐ Notice of Informal Patent Application, PTO-152
 ☒ Interview Summary, PTO-413
 ☒ Examiner's Amendment/Comment
 ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
 ☒ Examiner's Statement of Reasons for Allowance